

**ABSTRACT**

A method of reading a plurality of transponders 14.1 to 14.n forming part of an electronic radio frequency identification system 10 comprises the steps of prompting the transponders at 38 to transmit preambles 30 only of respective response digital sequences to a reader 12. The reader then locks onto the preamble 30 transmitted by one of the transponders and immediately causes a mute signal 38 to be broadcast to mute all of the transponders not yet transmitting. The reader then transmits during a first time window 42 a first command 40 to cause the one transponder to transmit a remainder of the sequence. Having received and read the remainder, the reader transmits a second command 44 during a second time window 46 to cause the one transponder to switch to a sleep mode wherein the one transponder no longer transmits any part of the sequence, and to unmute the muted transponders.

"000000" 000000

10